

INSIDER

*We welcome all our
new employees!*

NEW EMPLOYEES - CASTOOL

Moe Sistar
Lathe Operator

Fred Jordan
General Labour Equipment

Gurvinder Pannu
Drill Operator

Mike Landa
Packaging

Brian Francis
CNC Machinist

Johnson Kurian
Panel Builder

Stephen Imeson
Gun Drill Operator

Randy Mosure
Boring Mill Operator

Sharif Haidair
General Labour Manufacturing

Kyle Lewis
General Labour Cleaner

Fahmi Saeed
Equipment Technician

Simran Mavi
Production Planner

NEW EMPLOYEES - CASTOOL I80

Jaruwan Daengchart
QA&QC / Inventory Control

Somma Rueangwong
General Labor

Pimpaporn Kritsanasakul
Purchasing, BOI & Import

GLOBAL SALES DIRECTORS



Dan Dunn
*Extrusion Sales
Director*



Ken Chien
*Die Cast Sales
Director*

Dan Dunn has been very successful at helping extruders use our equipment and systems to optimize their productivity, and he continues to do so on a global scale.

Ken Chien is now Sales Director for Die Cast and continues his role as Product Director, helping with design, articles, simulations and to diagnose problems. He will be very involved in the set-up of the new heat treatment and nitriding equipment (see page 3).

MANAGEMENT TEAM CASTOOL I80



Raj Sagoo
Process Manager



**Wachirapan (Anu)
Rintawong**
Production Manager

Business is increasing steadily in Thailand, and we are busy preparing for expansion in 2020!

To meet those challenges, changes have been made in the management team: **Raj** being promoted to Process Manager and **Anu** promoted to Production Manager. Their skills compliment each other.

NEW POSITION - SCHEDULING



Simran Mavi
Production Planner

With 800 - 1000 orders to fill each month, it has become necessary to create a new position to coordinate this important task to meet our customers needs in a timely manner.

We welcome **Simran Mavi** to take on this responsibility. She worked as a Logistics Coordinator and Production Planner prior to joining Castool last month. With a BBA, Simran will be responsible for all scheduling at both plants.

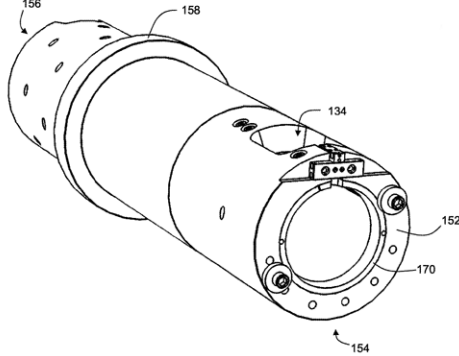
See page 8 for a complete list of our International Sales Team

DID YOU KNOW...

that Castool is constantly working on new technology and currently has patents pending for:

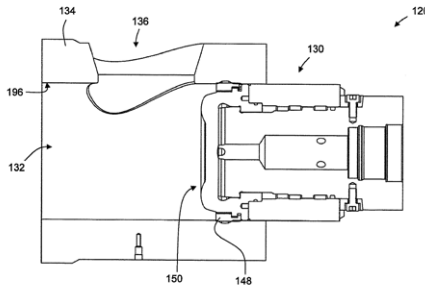
Tool Steel Composition for Component of Die Casting Apparatus or of Extrusion Press

Inventor: Lin Chun Chien



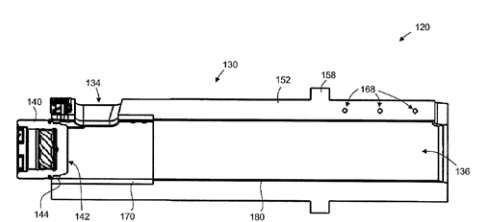
High Toughness Die Casting Piston

Inventor: Paul H. Robbins



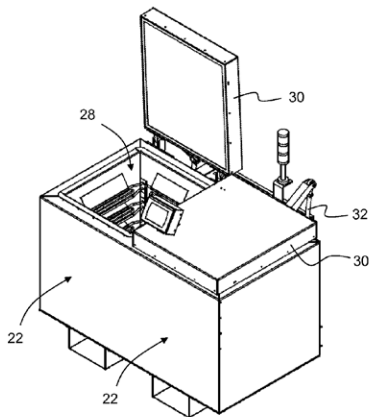
Shot Sleeve with Liner for Die Casting Apparatus and Method of Fabricating Same

Inventor: Paul H. Robbins



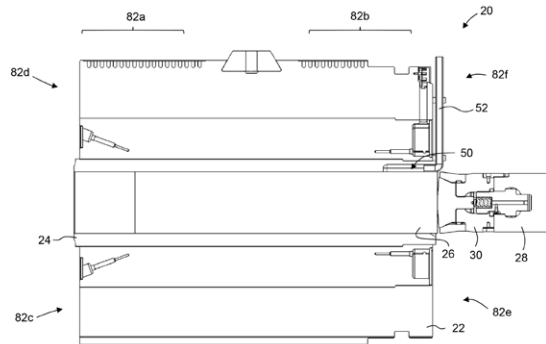
Extrusion Die Pre-Heating Device and Method

Inventor: Paul H. Robbins

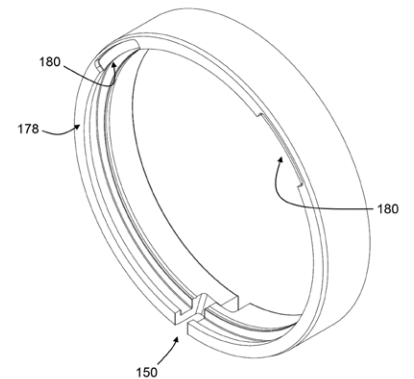


Vacuum-Assisted Extrusion Container and Method

Inventor: Paul H. Robbins

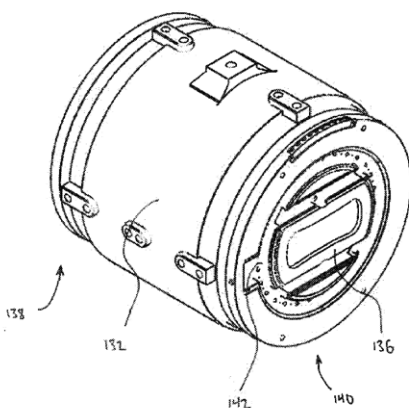


Improved Wear Ring with Slots for Die Casting Piston



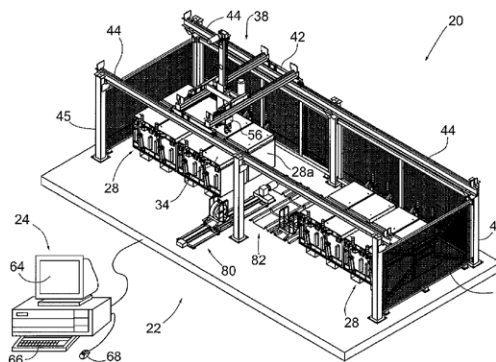
Rectangular Liner - Extrusion Press Container

Inventor: Paul H. Robbins



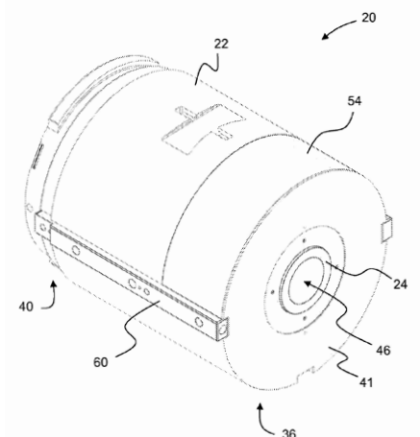
Overhead System for Die Preheating

Inventor: Paul H. Robbins



Air Cooled Container

Inventor: Paul H. Robbins



WE'RE EXPANDING!

In the planning stages is a new addition to the north side of the Uxbridge plant of almost 20,000 sq. ft with a back entrance and new loading dock.

2019 EQUIPMENT:

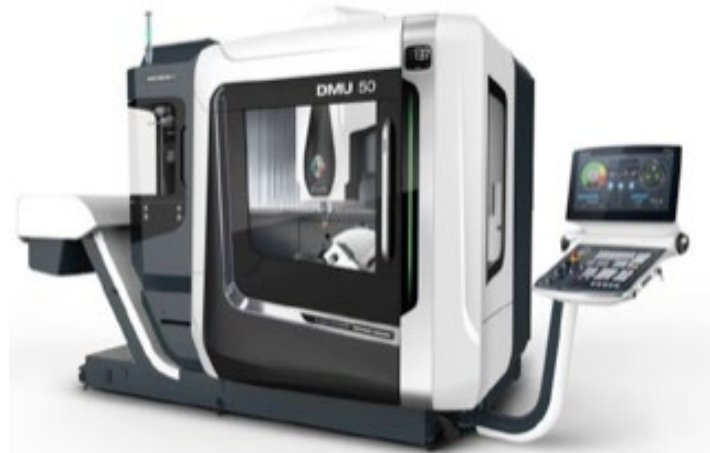
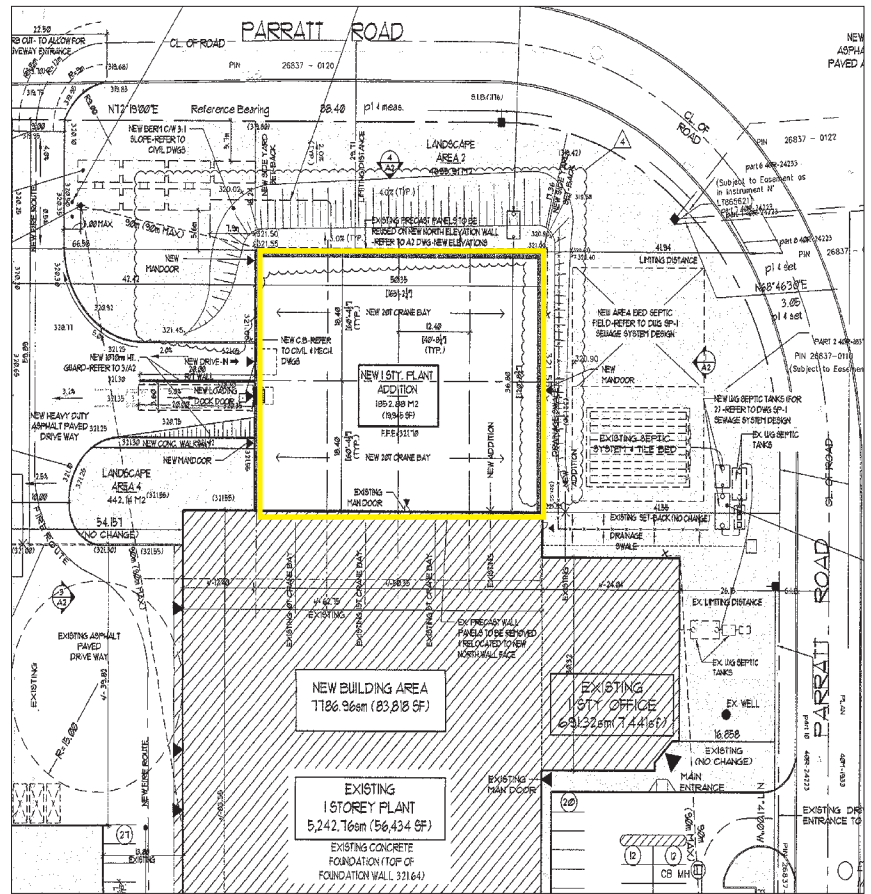
Heat Treatment Furnaces will allow for shorter lead times, especially for shot sleeves. We will be able to manage and protect our recipes, and create new recipes for heat treatment, nitriding and other surface coatings.



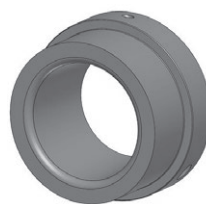
HARDENING FURNACE



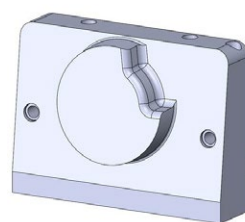
TEMPER AND NITRIDING FURNACE



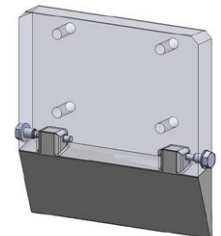
5 AXIS MILLING



SPRUE BUSHINGS



SHOT BLOCKS

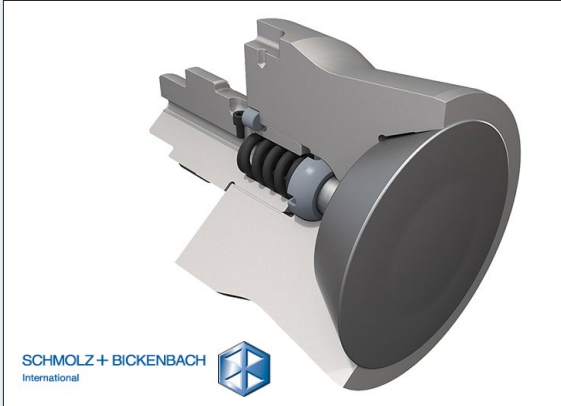


SHEAR BLADES

In an effort to reduce costs and lead times, we will be adding a **high speed 5 axis milling machine** for shear blades, sprue bushings, shot blocks and other tooling requiring multi axis milling.

Tuff Temper Marathon

Tuff Temper is a patented material made exclusively for Castool by Schmolz + Bickenbach. The higher molybdenum contents increase the Tuff-Temper hot yield strength (at 800°F/425°C) by about 10%. Marathon continues to work well for high pressure, long cycle time applications – typically with hard alloy profiles for the automotive industry.



The Aluject Applicator

We are now offering two different types of applicators at different price points, depending on the application and user preferences.



EXTRUSION UPDATES

QR Container continues to increase ram speeds



The simulation at University of Waterloo is providing us with a better understanding of the following relationships:

- The effect of container material (thermal conductivity of the steel 4340 vs H13) can reduce the profile exit temperature
- The effect of billet temperature to the exit temperature
- The effect of ram speed to the exit temperature
- The effect of liner temperature to the exit temperature
- The effect of container gradient (front to back) to the exit temperature

Conclusions:

You can increase productivity by 50% or more if you use the right container design to compensate/reduce profile exit temperature.

ARTICLE ALERT: **LIGHT METAL AGE**

Watch for our article on Extrusion Productivity in the coming months that will discuss the results of this simulation; how the container design, materials and temperature affects productivity



CLS-200

This Vegetable Ester Based Lubricant is performing well

- NO CONTAMINATION
- NO FLAME
- IMPROVED PRODUCT QUALITY

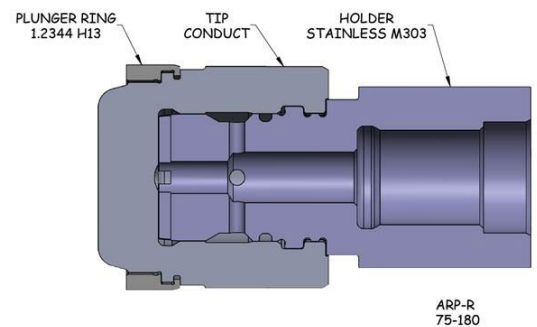
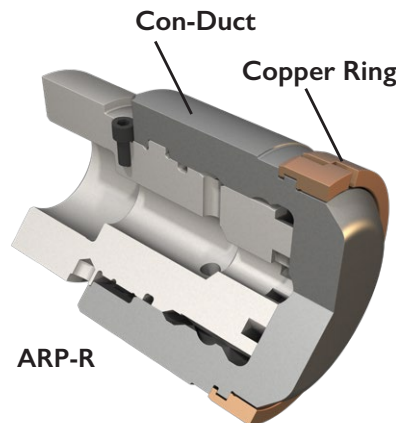
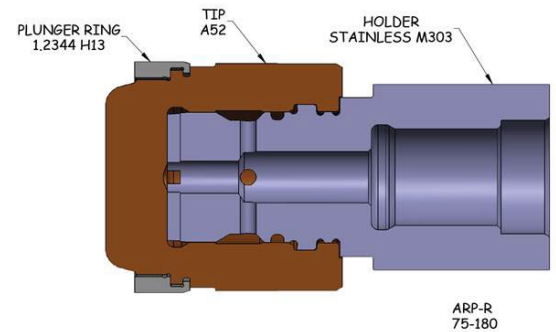
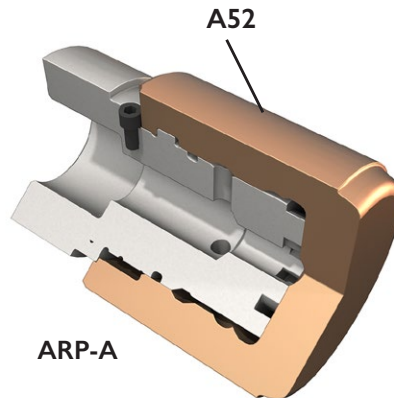
Plunger tip lubricant formulated for lubrication of all types of plunger tips: Beryllium copper, bronze, steel and all diameters

- Highly economical
- Biodegradable
- Does not contain graphite
- Blue in color
- Good adherence to tip and sleeve
- Excellent thermal stability
- Easily applied by automatic or manual spray equipment, supplied ready-for-use
- High flashpoint
- Very good anti-wear properties
- High load capacity
- High viscosity index
- Minimal smoke

DIE CAST UPDATES

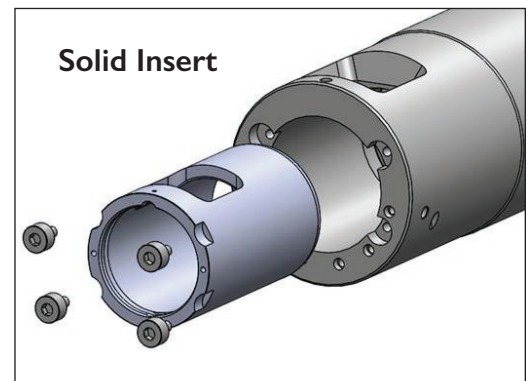
The CLASSIC: ARP regains product status as the one-piece simple plunger

A number of customers have been asking for a simpler Plunger Tip – the AMP and ABP designs are sometimes too complicated, depending on the application and user preferences. In response, we have reintroduced the ARP using Con-Duct and A52 with steel and copper rings.



Shot Sleeve Inserts

Inserts are becoming popular with many high production die casters. With advanced manufacturing techniques, there are no fit problems. Most inserts are nitrided and 3-P coated.



3D PRINTING

New technology available at EXCO ENGINEERING

EQUIPMENT:

2x EOS M400 3D printers

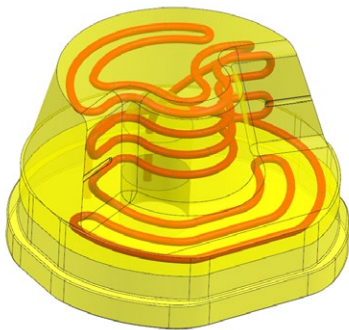
Build Envelope: 400mm³(16in³)

Material: Maraging Steel

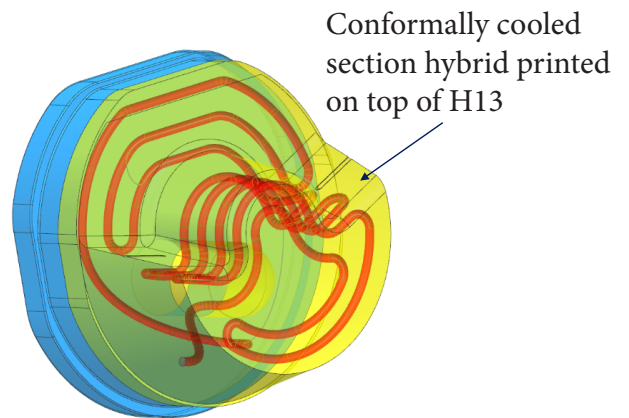
300+ inserts in production globally

For more information:www.excoeng.com/additive.php

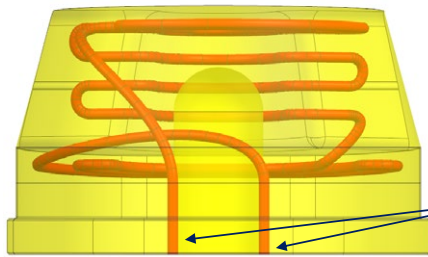
Case Study: 3D Printed Shot Blocks/Shot Risers



CONFORMALLY
COOLED INSERT

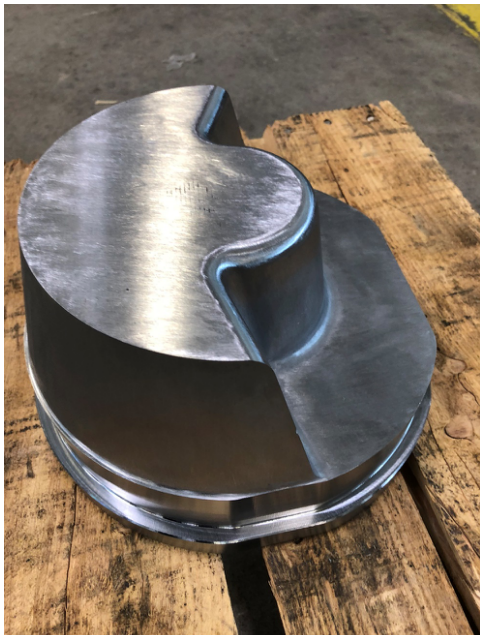


Conformally cooled
section hybrid printed
on top of H13



Single in, single out
to cool entire insert

FINISH MACHINED POLISHED



FINAL PRODUCT COATED





2018



TRADE SHOWS

Our global presence is key to our success



**EXTRUSION
TRADE SHOW**

**October 9 - 11, 2018
Düsseldorf, Germany**



**DIE CAST TRADE SHOW
BOOTH # 514**

**October 15 - 17, 2018
Indianapolis, USA**



**DIE CAST
TRADE SHOW**

**October 24 -26, 2018
Guadalajara, Mexico**



**DIE CAST
TRADE SHOW**

**November 8 - 10, 2018
Yokohama, Japan**



**EXTRUSION & DIE CAST
TRADE SHOW**

**November 21 - 24, 2018
Bangkok, Thailand**

ALUCAST® 2018

EXHIBITION & CONFERENCE - ALUMINIUM DIE-CASTING
6 - 8 DECEMBER 2018 | INDIA EXPO MART (IEML),
GREATER NOIDA, U.P. (DELHI-NCR), INDIA

**DIE CAST
TRADE SHOW**

**December 6 - 8 2018
New Delhi, India**

THE INTERNATIONAL TEAM

Dan Dunn Ken Chien

Natalya Pieri
Keattikhun Chaichana

Jean Dembowski
Tanmanun Tiantip
Christine Kaschuba
Sue Lotton
Sue Su
Dan Phudis
Ploy Robbins

Extrusion Sales Director *Die Cast Sales Director*

Product Specialist Europe
Product Specialist Asia

Commercial Manager
Commercial Supervisor
Customer Service
Customer Service
Customer Service
Customer Service
Marketing Director

CANADA / USA

Krystean Rose
Matt Binns
Andre Iulianetti
Jon Veenstra
Sebastien Derooy
Ron Steinenger
Sam Durbin
Tom Troxclair

Castool
Castool
Castool
JW Industries LLC
Sea Bass Outdoors
R-Bet Sales Inc
R-Bet Sales Inc
Troxclair and Associates

LATIN AMERICA

Valentin Meneses
Carlos Lima
Osvaldo Lomas
Alberto Forcato

Kautec America
KTC do Brasil
Casmet
Forcato Tecnologia

EUROPE

Emmanuel Bach
Olivier Druhen
Bertrand Schnell
Emmanuel Mandrelli
Pascal Schroung
Lars-Goran Nilsson
Luciano Pedrini
Jakub Jasiewicz
Edgar Seufert
Jurgen Barz

Comexale
Comexale
Comexale
Comexale
Comexale
TEL Nordic APS
Techno Moulds
KDO Komponenty Dla Odlewnictwa
Schmelzmetall
Schmelzmetall

UAE

Emmanuel Mandrelli

Comexale

ISRAEL

Tuvia Kornfield

NTK Plants Management

TURKEY

Cenk Sommez

BCM Makina Kimya

SOUTH AFRICA

Olivier Druhen

Comexale

JAPAN

Shigeyoshi Takagi
Tetsuya Ishida
Yasunori Ito
Nami Ito

Techno Consul Benchmarks
Tandem Technologies
KBS Kubo Manufacturing Co
KBS Kubo Manufacturing Co

KOREA

JH Song
SW Song
Taek Jean Hwang

ANK Ltd
ANK Ltd
GS Tech Solutions

TAIWAN

Jack Lee

Shiny Lee

CHINA

Daniel Cheng
Long Shun Cheng

OEA Bridge Link
OEA Bridge Link

THAILAND

Manu Mekdhanasarn
Patcharee Parkong

Siam Anglo Alloy Company Ltd
Siam Anglo Alloy Company Ltd

VIETNAM

Manu Mekdhanasarn
Patcharee Parkong
Tran Thi Thanh Thuy

Siam Anglo Alloy Company Ltd
Siam Anglo Alloy Company Ltd
Thang Long Mechanics Equipment Co

INDONESIA

Yovinus Krisnanto

PT Wilisindomas Indahmaktur

MALAYSIA

Manu Mekdhanasarn
Patcharee Parkong
Chek Tay

Siam Anglo Alloy Company Ltd
Siam Anglo Alloy Company Ltd
Lustre Specialty Materials

SINGAPORE

Manu Mekdhanasarn
Patcharee Parkong

Siam Anglo Alloy Company Ltd
Siam Anglo Alloy Company Ltd

INDIA

Sachin Kumar

AUSTRALIA/NEW ZEALAND

Doug Loader

Extrusion Machine Co New Zealand